AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Page 9

Please amend the paragraph beginning on line 8 through Page 10, line 16 as follows:

The solid state laser chip 2 in accordance with this embodiment is pumped by the pumping source 20 from a lateral side surface thereof. In the solid state laser chip 2, since the thin solid state laser medium 3 and the non-doped medium 4 are bonded to each other so that they are integral with each other, a light incidence surface via which pumping light from the pumping source is incident into the solid state laser chip is the lateral side surface which is a united one of a lateral side surface of the thin solid state laser medium 3 and a lateral side surface of the non-doped medium 4. This united surface is a pumping surface 9. The pumping light source 20 can be a semiconductor laser. Especially, the pumping light source 20 can be a semiconductor laser bar which can efficiently emit high-power pumping light. For example, the pumping light source 20 has a semiconductor laser 21 including a single-layer semiconductor laser bar 22 so as to pump the solid state laser chip. The semiconductor laser bar 22 can have a light emitting surface having a size of several micrometers in a direction of the fast axis thereof, and having a size of about 10mm in a direction of the slow axis thereof. In such a case, when the solid state laser pumping module is formed so that the pumping

surface 9 of the solid state laser chip 2 has a size in a direction (referred to as a width direction) perpendicular to the direction of the thickness of the solid state laser chip 2, the size being equal to or larger than that of the semiconductor laser 21 in the direction of the slow axis thereof, and ~~the distance between the semiconductor laser bar 22 and the pumping surface 9 is equal to or shorter than the distance~~ the semiconductor laser bar 22 is located at a distance to the pumping surface 9 which is equal to or shorter than the size of the solid state laser chip 2 in the direction of the thickness thereof, almost all the pumping light can be efficiently incident upon the solid state laser chip 2 via the pumping surface 9. The pumping light 23 incident upon the solid state laser chip 2 via the pumping surface 9 propagates through the solid state laser chip 2 while being repeatedly total-reflected within the solid state laser chip 2. When the propagating pumping light 23 passes through the thin solid state laser medium 3, the pumping light 23 is absorbed by the thin solid state laser medium 3. Thus, while the pumping light 23 propagates zigzag through the interior of the solid state laser chip 2, it is absorbed by the thin solid state laser medium 3 and the thin solid state laser medium 3 is pumped by the pumping light.

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Please amend the paragraph beginning on line 26 through Page 13, line 7 as follows:

For example, since the absorption rate per unit length also becomes (m+1) times

that of the related art thin solid state laser medium when the concentration of the active material is increased to (m+1) times that of the active material contained in the related art thin solid state laser medium, the same absorption rate as that of the related art thin solid state laser medium can be secured even when the absorption length is reduced to 1/(m+1) of that of the related art thin solid state laser medium. Especially, when the active material is Yb and the base material is YAG (Yttrium Aluminum Garnet: $Y_3Al_5O_{12}$), it is possible theoretically to replace 100% of Y (Yttrium) of YAG with Yb(Ytterbium). It is therefore easy to dope a high concentration of Yb into YAG so as to provide a large absorption rate per unit length.

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Please amend the paragraph beginning on line 6 through Page 40, line 21 as follows:

An example of the thin solid state laser medium composite material 10 is shown in Fig. 10. In this example, the solid state laser medium 3 has a circular shape. As an alternative, the solid state laser medium 3 can have a polygonal or elliptic shape. Fig. 11 shows a side view of the solid state laser chip 2 which employs the thin solid state laser medium composite material 10. The boundary surface of the thin solid state laser medium composite material 10 which is bonded to the non-doped medium 4 has a rectangular shape. In this cross section, the thin solid state laser medium 3 included in the thin solid state laser medium composite material 10 has a circular shape, the second

non-doped media 11 are surrounded by the circular thin solid state laser medium 3, and the thin solid state laser medium composite material 10 has a rectangular shape. The rectangular thin solid state laser medium composite material 10 and the non-doped medium 4 having the same shape as the thin solid state laser medium composite material 10 are bonded to each other over the whole of their boundary surfaces, and the reflecting coating 6 for reflecting light having the same wavelength as laser light to be pumped is formed on the lower surface of the thin solid state laser medium composite material 10 which is opposite to the boundary surface of the thin solid state laser medium composite material 10 to which the non-doped medium 4 is bonded. Lateral side surfaces of the solid state laser chip 2 which is thus constructed serve as the pumping surfaces 9. Since the solid state laser chip 2 is constituted as mentioned above, it has a circular gain region. Therefore, when carrying out laser oscillation, the solid state laser chip can provide output laser light ~~3~~ 33 having a concentric circular shape without having to use a special measure for arranging a circular aperture in the laser cavity thereof so as to shape the output laser light into a circle in cross section. If the solid state laser chip has a rectangular gain region and provides circular output laser light, since energy is extracted only from a part of the thin solid state laser medium in which the circular laser light and the gain region overlap each other, the rectangular gain region has a portion from which energy cannot be extracted even though pumped by the pumping light. As a result, the efficiency of extraction of energy may be reduced

in this case. In contrast, since the thin solid state laser medium 3 in accordance with this embodiment can have a circular shape and hence a circular gain region, the percentage by which the circular laser beam and the gain region overlap each other is high and therefore a high degree of efficiency of extraction of energy is obtained. Therefore, the present embodiment offers an advantage of being able to provide high-power laser light with a high degree of efficiency.